

In the Claims

Cancel claims 1-4 without prejudice or disclaimer to the subject matter recited therein.

Amend the following claims:

1 5. (Amended) A slider for supporting a magnetic transducer above the surface of
2 a rotating disk medium, said slider comprising:
3 a body;
4 a plurality of rail members extending outward from said body in a direction
5 towards said medium, each of said rail members having a leading and a trailing edge with
6 said leading edge facing in the general direction of relative motion between said
7 transducer and said medium, and wherein said leading edge has a narrower width as
8 compared to said trailing edge;
9 each of said rail members also having an air-bearing surface which is alternately
10 brought into contact with and separated from said surface of said medium, said air-
11 bearing surface being generally parallel to said surface of said medium.

1 8. (Amended) The slider of Claim 5 wherein each of said rail members has a
2 parabolic shape, with the narrow part of said parabolic shape pointing in said direction.

1 9. (Amended) The slider of Claim 5 wherein said leading edges are tapered away
2 from said air-bearing surfaces to create a lifting effect to maintain said body at a
3 predetermined height above said surface of said medium.

Add the following claims:

1 10. A slider, comprising
2 a transducer for transferring information to and from a rotating disk medium
3 during read and write operations; and
4 first and second rails, wherein each of the rails has a leading edge that faces into a
5 general direction of relative motion between the slider and the medium, a trailing edge
6 that faces away from the direction, and an air-bearing surface, the leading edge has a
7 width that is substantially perpendicular to the direction, the trailing edge has a width that
8 is substantially perpendicular to the direction, and the width of the leading edge is
9 substantially narrower than the width of the trailing edge.

1 11. The slider of Claim 10 wherein each of the rails includes a V-shaped
2 portion, a narrow part of the V-shaped portion is the leading edge and a wide part of the
3 V-shaped portion is spaced from the leading edge.

1 12. The slider of Claim 11 wherein the wide part of the V-shaped portion is
2 the trailing edge.

1 13. The slider of Claim 12 wherein a thickness of the narrow part of the V-
2 shaped portion is substantially identical to a thickness of the wide part of the V-shaped
3 portion.

1 14. The slider of Claim 12 wherein a thickness of the narrow part of the V-
2 shaped portion is substantially less than a thickness of the wide part of the V-shaped
3 portion.

1 15. The slider of Claim 11 wherein the wide part of the V-shaped portion is
2 spaced from the trailing edge.

1 16. The slider of Claim 15 wherein a distance between the narrow part of the
2 V-shaped portion and the wide part of the V-shaped portion is substantially less than a
3 distance between the wide part of the V-shaped portion and the trailing edge.

1 17. The slider of Claim 10 wherein each of the rails includes a U-shaped
2 portion, a narrow part of the U-shaped portion is the leading edge and a wide part of the
3 U-shaped portion is spaced from the leading edge.

1 18. The slider of Claim 17 wherein the wide part of the U-shaped portion is
2 spaced from the trailing edge.

1 19. The slider of Claim 17 wherein each of the rails includes a rectilinear
2 portion between the U-shaped portion and the trailing edge.

1 20. The slider of Claim 10 wherein each of the rails includes a wedge-shaped
2 portion, a narrow part of the wedge-shaped portion is the leading edge and a wide part of
3 the wedge-shaped portion is spaced from the leading edge.

1 21. The slider of Claim 20 wherein the wide part of the wedge-shaped portion
2 is spaced from the trailing edge.

1 22. The slider of Claim 20 wherein each of the rails includes a rectilinear
2 portion between the wedge-shaped portion and the trailing edge, and the narrow part of
3 the wedge-shaped portion is aligned with an inner side of the rectilinear portion and
4 spaced from an outer side of the rectilinear portion.

1 23. The slider of Claim 10 wherein each of the rails includes a parabolic-
2 shaped portion, a narrow part of the parabolic-shaped portion is the leading edge and a
3 wide part of the parabolic-shaped portion is spaced from the leading edge.

1 24. The slider of Claim 23 wherein the wide part of the parabolic-shaped
2 portion is spaced from the trailing edge.

1 25. The slider of Claim 23 wherein each of the rails includes a rectilinear
2 portion between the parabolic-shaped portion and the trailing edge.

1 26. The slider of Claim 10 wherein each of the rails has a hyperbolic-shaped
2 portion, a narrow part of the hyperbolic-shaped portion is the leading edge and a wide
3 part of the hyperbolic-shaped portion is spaced from the leading edge.

1 27. The slider of Claim 26 wherein the wide part of the hyperbolic-shaped
2 portion is spaced from the trailing edge.

1 28. The slider of Claim 26 wherein each of the rails includes a rectilinear
2 portion between the hyperbolic-shaped portion and the trailing edge.

1 29. The slider of Claim 10 wherein the air-bearing surface is a flat continuous
2 surface.

1 30. The slider of Claim 10 wherein the slider has a leading edge that faces into
2 the direction and a trailing edge that faces away from the direction, the leading edge of
3 each of the rails extends to the leading edge of the slider, and the trailing edge of each of
4 the rails extends to the trailing edge of the slider.

1 31. The slider of Claim 10 wherein the slider has first and second outer side
2 surfaces, each of the rails has an outer side surface, a portion of the outer side surface of
3 the first rail extends to the first outer side surface of the slider, and a portion of the outer
4 side surface of the second rail extends to the second outer side surface of the slider.

1 32. The slider of Claim 10 wherein each of the rails has an inner and outer
2 surface and the leading edge is symmetrically disposed between the inner and outer
3 surfaces.

1 33. The slider of Claim 10 wherein each of the rails has an inner surface and
2 outer surface and the leading edge is asymmetrically disposed between the inner and
3 outer surfaces.

1 34. The slider of Claim 10 wherein each of the rails has a uniform thickness.

1 35. The slider of Claim 10 wherein each of the rails has a non-uniform
2 thickness.

1 36. The slider of Claim 10 wherein each of the rails deflects debris on the
2 medium away from the air-bearing surface.

1 37. The slider of Claim 10 wherein each of the rails alternately contacts and
2 moves away from the medium during the read and write operations.

1 38. The slider of Claim 10 wherein each of the rails maintains near-contact
2 with the medium during the read and write operations.

1 39. The slider of Claim 10 wherein each of the rails maintains a near-contact
2 flying height in the range of 1 to 3 microinches during the read and write operations.

1 40. A slider, comprising:
2 a body;
3 a transducer for transferring information to and from a rotating disk medium
4 during read and write operations; and
5 first and second rails that extend from the body towards the medium, wherein
6 each of the rails has a leading edge that faces into a general direction of relative motion
7 between the slider and the medium, a tapered width adjacent to the leading edge, a
8 trailing edge that faces away from the direction, and an air-bearing surface that faces the
9 medium, the leading edge, trailing edge and tapered width extend between the air-bearing
10 surface and the body, and the leading edge is narrower than the trailing edge.

1 41. The slider of Claim 40 wherein each of the rails includes a V-shaped
2 portion, a narrow part of the V-shaped portion is the leading edge and a wide part of the
3 V-shaped portion is spaced from the leading edge.

1 42. The slider of Claim 41 wherein the wide part of the V-shaped portion is
2 the trailing edge.

1 43. The slider of Claim 42 wherein a thickness of the narrow part of the V-
2 shaped portion is substantially identical to a thickness of the wide part of the V-shaped
3 portion.

1 44. The slider of Claim 42 wherein a thickness of the narrow part of the V-
2 shaped portion is substantially less than a thickness of the wide part of the V-shaped
3 portion.

1 45. The slider of Claim 41 wherein the wide part of the V-shaped portion is
2 spaced from the trailing edge.

1 46. The slider of Claim 45 wherein each of the rails includes a rectilinear
2 portion between and adjacent to the V-shaped portion and the trailing edge.

1 47. The slider of Claim 45 wherein a distance between the narrow part of the
2 V-shaped portion and the wide part of the V-shaped portion is substantially less than a
3 distance between the wide part of the V-shaped portion and the trailing edge.

1 48. The slider of Claim 40 wherein each of the rails includes a U-shaped
2 portion, a narrow part of the U-shaped portion is the leading edge and a wide part of the
3 U-shaped portion is spaced from the leading edge.

1 49. The slider of Claim 48 wherein the wide part of the U-shaped portion is
2 spaced from the trailing edge.

1 50. The slider of Claim 48 wherein each of the rails includes a rectilinear
2 portion between and adjacent to the U-shaped portion and the trailing edge.

1 51. The slider of Claim 40 wherein each of the rails includes a wedge-shaped
2 portion, a narrow part of the wedge-shaped portion is the leading edge and a wide part of
3 the wedge-shaped portion is spaced from the leading edge.

1 52. The slider of Claim 51 wherein the wide part of the wedge-shaped portion
2 is spaced from the trailing edge.

1 53. The slider of Claim 51 wherein each of the rails includes a rectilinear
2 portion between and adjacent to the wedge-shaped portion and the trailing edge, and the
3 narrow part of the wedge-shaped portion is aligned with an inner side of the rectilinear
4 portion and spaced from an outer side of the rectilinear portion.

1 54. The slider of Claim 40 wherein each of the rails includes a parabolic-
2 shaped portion, a narrow part of the parabolic-shaped portion is the leading edge and a
3 wide part of the parabolic-shaped portion is spaced from the leading edge.

1 55. The slider of Claim 54 wherein the wide part of the parabolic-shaped
2 portion is spaced from the trailing edge.

1 56. The slider of Claim 54 wherein each of the rails includes a rectilinear
2 portion between and adjacent to the parabolic-shaped portion and the trailing edge.

1 57. The slider of Claim 40 wherein each of the rails has a hyperbolic-shaped
2 portion, a narrow part of the hyperbolic-shaped portion is the leading edge and a wide
3 part of the hyperbolic-shaped portion is spaced from the leading edge.

1 58. The slider of Claim 57 wherein the wide part of the hyperbolic-shaped
2 portion is spaced from the trailing edge.

1 59. The slider of Claim 57 wherein each of the rails includes a rectilinear
2 portion between and adjacent to the hyperbolic-shaped portion and the trailing edge.

1 60. The slider of Claim 40 wherein the body has a leading edge that faces into
2 the direction and a trailing edge that faces away from the direction, the leading edge of
3 each of the rails extends to the leading edge of the body, and the trailing edge of each of
4 the rails extends to the trailing edge of the body.

1 61. The slider of Claim 40 wherein the body has first and second outer side
2 surfaces, the leading edge of the first rail does not extend to the first outer side surface,
3 the trailing edge of the first rail extends to the first outer side surface, the leading edge of
4 the second rail does not extend to the second outer side surface, and the trailing edge of
5 the second rail extends to the second outer side surface.

1 62. The slider of Claim 40 wherein the tapered width extends across a
2 majority of a distance between the leading and trailing edges.

1 63. The slider of Claim 40 wherein the tapered width extends across a
2 minority of a distance between the leading and trailing edges.

1 64. The slider of Claim 40 wherein each of the rails has an inner and outer
2 surface and the leading edge is symmetrically disposed between the inner and outer
3 surfaces.

1 65. The slider of Claim 40 wherein each of the rails has an inner surface and
2 outer surface and the leading edge is asymmetrically disposed between the inner and
3 outer surfaces.

1 66. The slider of Claim 40 wherein each of the rails has a uniform thickness
2 between the leading and trailing edges.

1 67. The slider of Claim 40 wherein each of the rails has a first thickness at the
2 leading edge, a second thickness at the trailing edge, and the first thickness is less than
3 the second thickness.

1 68. The slider of Claim 40 wherein each of the rails maintains near-contact
2 with the medium during the read and write operations.

1 69. The slider of Claim 40 wherein each of the rails maintains a near-contact
2 flying height in the range of 1 to 3 microinches during the read and write operations.